

MOTOR AUTO REPAIR MANUAL

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CARBURETORS

ROCHESTER 2SE & E2SE ADJUSTMENT SPECIFICATIONS

See Tune Up Chart in car chapters for curb and fast idle speeds.

Year	Carb. Production No.	Float Level	Accel. Pump	Choke Coil Lever	Choke Rod	Vacuum Break		Air Valve Rod	Choke Setting	Unloader	Secondary Lockout
						Primary	Secondary				
AMERICAN MOTORS											
1980	17080681	3/16	17/32	.085	18°	20°	—	2°	②	32°	.065
	17080683	3/16	1/2	.085	18°	20°	—	2°	②	32°	.065
	17080686, 688	3/16	1/2	.085	18°	20°	—	2°	②	32°	.065
	17080781, 782	3/16	7/32	.085	18°	20°	—	2°	②	32°	.065
1981	17081790	.256	.128	.085	—	19°	—	2°	②	32°	.065
	17081791,796	.208	.128	.085	—	19°	—	2°	②	32°	.065
	17081792, 793	.256	.128	.085	—	19°	—	2°	②	32°	.065
	17081794, 795	.256	.128	.085	—	19°	—	2°	②	32°	.065
	17081797	.208	.128	.065	—	19°	—	2°	②	32°	.085
	17081993	.256	.128	.085	—	19°	—	2°	②	32°	.065
1982	17082380	.125	.128	.085	—	21°	—	2°	②	34°	.050-.080
	17082383	.256	.128	.085	—	21°	—	2°	②	34°	.050-.080
	17082385	.256	.128	.085	—	21°	—	2°	②	34°	.050-.080
	17082386	.125	.128	.050-.080	—	19°	—	2°	②	34°	.050-.080
	17082387	.125	.128	.085	—	19°	—	2°	②	34°	.050-.080
	17082388	.125	.128	.085	—	19°	—	2°	②	34°	.050-.080
	17082389	.125	.128	.085	—	19°	—	2°	②	34°	.050-.080
1983	17082380	①	.128	.085	—	21°	—	2°	②	34°	.050-.080
	17083384	.138	.128	.085	—	19°	—	2°	②	34°	.050-.080
	17083385	.138	.128	.085	—	19°	—	2°	②	34°	.050-.080

①—Man. trans., .216; auto. trans., .138.

②—Tamper-resistant.

GENERAL MOTORS

1979	17059674	7/32	1/2	.085	18°	22°	—	.025	2 Rich	32°	.030
	17059675	7/32	17/32	.085	18°	22°	—	.025	1 Rich	32°	.030
	17059676	7/32	1/2	.085	18°	22°	—	.025	2 Rich	32°	.030
	17059677	7/32	17/32	.085	18°	22°	—	.025	1 Rich	32°	.030
	17059750	3/32	15/32	.085	21°	22°	35°	.040	Index	35°	.030
	17059751	3/16	15/32	.085	21°	22°	35°	.040	Index	35°	.030
	17059752	3/16	15/32	.085	21°	22°	35°	.040	Index	35°	.030
	17059753	3/16	15/32	.085	21°	22°	35°	.040	Index	35°	.030
1980	17059614, 616	3/16	1/2	.085	18°	17°	—	1°	⑤	36°	.025
	17059615, 617	3/16	17/32	.085	18°	19°	—	1°	⑤	36°	.025
	17059618, 620	3/16	1/2	.085	18°	17°	—	1°	⑤	36°	.025
	17059619, 621	3/16	17/32	.085	18°	19°	—	1°	⑤	36°	.025
	17059622, 624	5/32	17/32	.085	18°	17°	—	1°	⑤	36°	.025
	17059623, 625	5/32	17/32	.085	18°	19°	—	1°	⑤	36°	.025
	17059650, 652	1/4	17/32	.085	24°	30°	38°	1°	⑤	30°	.025
	17059651, 653	1/4	17/32	.085	24°	30°	37°	1°	⑤	30°	.025
	17059660, 662	1/4	17/32	.085	24°	30°	32°	1°	⑤	30°	.025
	17059664, 665	1/4	17/32	.085	24°	30°	32°	1°	⑤	30°	.025
	17059666, 667	1/4	17/32	.085	24°	26°	32°	1°	⑤	30°	.025
	17059714, 716	5/32	1/2	.085	18°	19°	—	1°	⑤	32°	.025
	17059715, 717	5/32	1/2	.085	18°	21°	—	1°	⑤	32°	.120
	17059718, 720	5/32	1/2	.085	18°	19°	—	1°	⑤	32°	.025
	17059721, 723	5/32	17/32	.085	①	23°	—	1°	⑤	32°	.025
	17059722, 724	5/32	15/32	.085	①	19°	—	1°	⑤	32°	.025
	17059760	1/4	—	.085	16°	24°	30°	1°	⑤	35°	.025
	17059762, 763	1/4	—	.085	16°	24°	33°	1°	⑤	35°	.025
	17059768	1/4	—	.085	16°	20°	30°	1°	⑤	35°	.025

Continued

ROCHESTER 2SE & E2SE ADJUSTMENT SPECIFICATIONS—Continued

See Tune Up Chart in car chapters for curb and fast idle speeds.

Year	Carb. Production No.	Float Level	Accel. Pump	Choke Coil Lever	Choke Rod	Vacuum Break		Air Valve Rod	Choke Setting	Unloader	Secondary Lockout
						Primary	Secondary				
GENERAL MOTORS—Continued											
	17059774, 776	5/32	1/2	.085	18°	19°	—	1°	⑤	32°	.025
	17059775, 777	5/32	17/32	.085	18°	21°	—	1°	⑤	32°	.025
	17080621, 622	1/8	9/16	—	17°	22°	35°	2°	⑤	41°	—
	17080623, 626	1/8	9/16	—	17°	22°	35°	2°	⑤	41°	—
	17080674, 676	3/16	1/2	.085	18°	19°	—	2°	⑤	32°	.025
	17080675, 677	3/16	1/2	.085	18°	21°	—	2°	⑤	32°	.025
	17080720, 722	1/8	9/16	—	17°	20°	35°	2°	⑤	41°	—
	17080721, 723	1/8	9/16	—	17°	23.5°	35°	2°	⑤	41°	—
1981	17081650, 652	1/4	—	—	17°	25°	34°	1°	⑤	35°	.012
	17081651, 653	1/4	—	—	17°	29°	35°	1°	⑤	35°	.012
	17081656, 658	1/4	—	—	25°	30°	35°	1°	⑤	33°	.012
	17081670, 672	5/32	—	—	18°	19°	—	1°	⑤	32°	.012
	17081671, 673	5/32	—	—	33.5°	21°	—	1°	⑤	32°	.012
	17081740, 742	1/4	—	—	17°	25°	34°	1°	⑤	35°	.012
	17081746, 748	1/4	—	—	25°	30°	35°	1°	⑤	33°	.012
1982	17081600, 06	5/16	—	.085	18°	23°	27°	1°	⑤	35°	.025
	17081601	5/16	—	.085	18°	21°	27°	1°	⑤	35°	.025
	17081607, 09	5/16	—	.085	18°	21°	27°	1°	⑤	35°	.025
	17082300, 04	5/16	—	.085	18°	23°	27°	1°	⑤	35°	.025
	17082301, 03	5/16	—	.085	18°	21°	27°	1°	⑤	35°	.025
	17082305	5/16	—	.085	18°	21°	27°	1°	⑤	35°	.025
	17082316	1/4	—	.085	17°	30°	34°	1°	⑤	45°	.025
	17082317	1/4	—	.085	17°	30°	35°	1°	⑤	45°	.025
	17082320, 21	1/4	—	.085	25°	30°	35°	1°	⑤	45°	.025
	17082390	13/32	—	.085	17°	30°	34°	1°	⑤	45°	.025
	17082391	13/32	—	.085	25°	30°	35°	1°	⑤	45°	.025
	17082446, 48	5/16	—	.085	18°	20°	27°	1°	⑤	35°	.025
	17082447, 49	5/16	—	.085	18°	20°	25°	1°	⑤	35°	.025
	17082490	13/32	—	.085	17°	30°	34°	1°	⑤	45°	.025
	17082491	13/32	—	.085	25°	30°	35°	1°	⑤	45°	.025
	17082630	5/16	—	.085	18°	23°	27°	1°	⑤	35°	.025
	17082631	5/16	—	.085	18°	23°	25°	1°	⑤	35°	.025
	17082632	5/16	—	.085	18°	20°	27°	1°	⑤	35°	.025
	17082640	1/4	—	.085	17°	30°	34°	1°	⑤	45°	.025
	17082641	1/4	—	.085	17°	30°	35°	1°	⑤	45°	.025
	17082642	1/4	—	.085	25°	30°	35°	1°	⑤	45°	.025
	1983	17083356	13/32	—	.085	22°	25°	35°	1°	⑤	30°
17083357		13/32	—	.085	22°	25°	35°	1°	⑤	30°	—
17083358		13/32	—	.085	22°	25°	35°	1°	⑤	30°	—
17083359		13/32	—	.085	22°	25°	35°	1°	⑤	30°	—
17083368		②	—	.085	22°	25°	35°	1°	⑤	30°	—
17083369		②	—	.085	22°	25°	35°	1°	⑤	30°	—
17083370		②	—	.085	22°	25°	35°	1°	⑤	30°	—
17083371		②	—	.085	22°	25°	35°	1°	⑤	30°	—
17083450		③	—	.085	28°	27°	35°	1°	⑤	45°	—
17083451		③	—	.085	28°	27°	35°	1°	⑤	45°	—
17083452		③	—	.085	28°	27°	35°	1°	⑤	45°	—
17083453		③	—	.085	28°	27°	35°	1°	⑤	45°	—
17083454		③	—	.085	28°	27°	35°	1°	⑤	45°	—
17083455		③	—	.085	28°	27°	35°	1°	⑤	45°	—
17083456		③	—	.085	28°	27°	35°	1°	⑤	45°	—

Continued

CARBURETORS

ROCHESTER 2SE & E2SE ADJUSTMENT SPECIFICATIONS—Continued

See Tune Up charts in car chapters for curb and fast idle speeds.

Year	Carb. Production No.	Float Level	Accel. Pump	Choke Coil Lever	Choke Rod	Vacuum Break		Air Valve Rod	Choke Setting	Unloader	Secondary Lockout
						Primary	Secondary				
GENERAL MOTORS—Continued											
	17083458	1/4	—	.085	28°	27°	35°	1°	⑤	45°	—
	17083459	1/4	—	.085	28°	27°	35°	1°	⑤	45°	—
	17083630	④	—	.085	28°	27°	35°	1°	⑤	45°	—
	17083631	④	—	.085	28°	27°	35°	1°	⑤	45°	—
	17083632	④	—	.085	28°	27°	35°	1°	⑤	45°	—
	17083633	④	—	.085	28°	27°	35°	1°	⑤	45°	—
	17083634	④	—	.085	28°	27°	35°	1°	⑤	45°	—
	17083635	④	—	.085	28°	27°	35°	1°	⑤	45°	—
	17083636	④	—	.085	28°	27°	35°	1°	⑤	45°	—
	17083650	1/8	—	.085	28°	27°	35°	1°	⑤	45°	—

①—Early models with three step fast idle cam, 18°; late models with two step fast idle cam, 33°.

②—Pontiac models, 13/32"; exc. Pontiac models,

1/8".

③—Citation and Camaro, 1/8"; exc. Citation and Camaro, 1/4".

④—Pontiac and Buick models, 13/32"; exc. Pontiac and Buick models, 1/4".

⑤—Tamper-resistant.

VARAJET 2SE & E2SE ADJUSTMENTS

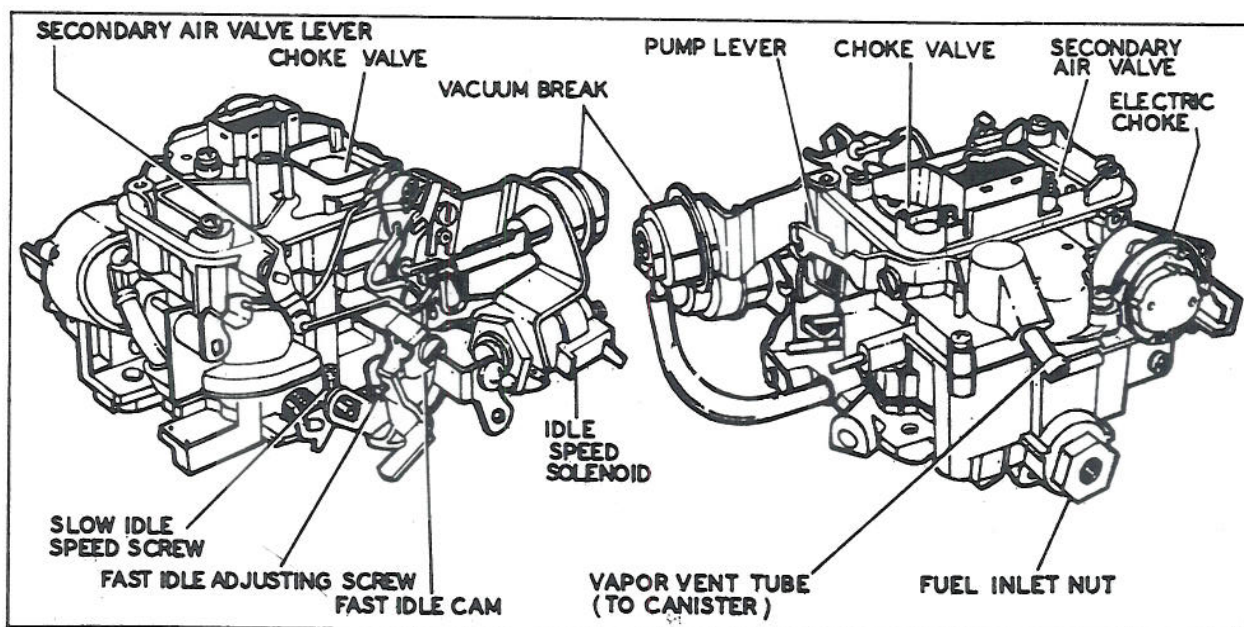


Fig. 1 Varajet 2SE Carburetor

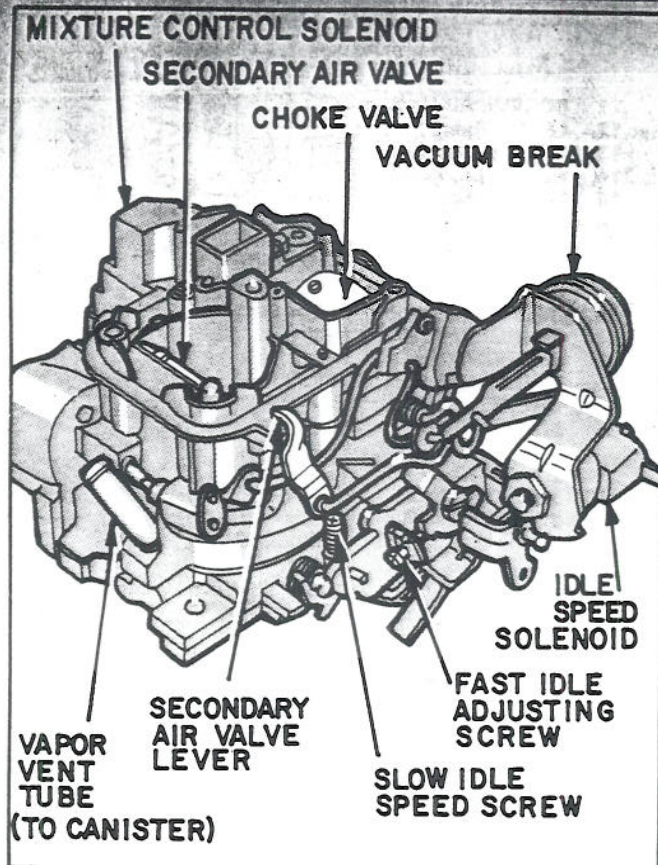


Fig. 1A Varajet E2SE Carburetor (Typical)

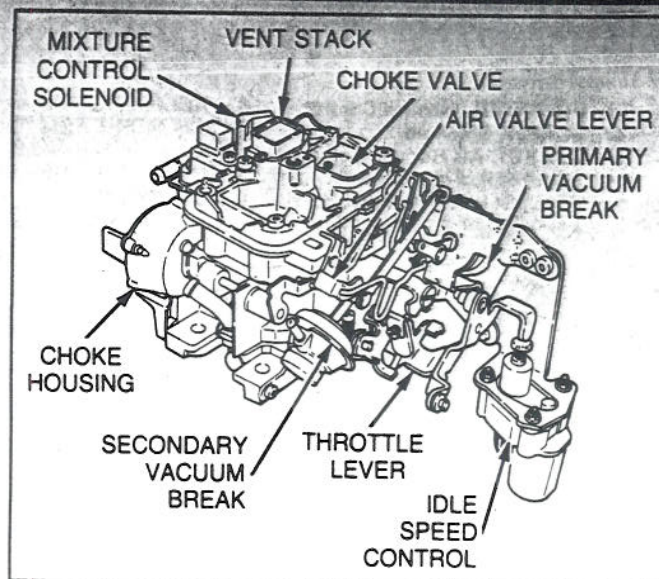


Fig. 1B E2SE carburetor equipped with idle speed control motor

The Varajet models 2SE and E2SE, Figs. 1 and 1A, are two barrel, two stage, down draft design carburetors. Aluminum die castings are used for the air horn, float bowl and throttle body. A heat insulator gasket is used between the throttle body and float bowl to reduce heat transfer to the float bowl.

The primary stage has a triple venturi, with a small 35mm bore, resulting in good fuel metering control during idle and part throttle operation. The secondary stage has a 46mm bore, providing sufficient air capacity for engine power requirements. An air valve is used in the secondary stage with a single tapered metering rod.

The float chamber is internally vented through a vertical vent cavity in the air horn. The float chamber is also externally vented through a tube in the air horn. A hose connects this tube directly to a vacuum operated vapor vent valve located in the vapor canister. When the engine is not running, the canister vapor vent valve is open, allowing fuel vapor from the float chamber to pass into the canister where the vapor is stored until normally purged.

An adjustable part throttle screw is used in the float bowl to aid emission control. This screw is factory pre-set and a plug is installed to prevent further adjustment or fuel leakage. The plug should not be removed or the screw setting disturbed. If float bowl replacement is required, the service float bowl will include a factory pre-set and plugged adjustable part throttle screw.

A hot idle compensator is used on some models and is located in the air horn. The opening and closing of the hot idle compensator valve is controlled by a bi-metal strip that is calibrated to a specific temperature. When the valve opens, additional air is allowed to

bypass the throttle valves and enter the intake manifold to prevent rough idle during periods of hot engine operation.

The idle mixture screw is recessed in the throttle body and is sealed with a hardened steel plug to prevent alteration of the factory pre-set mixture setting. The plug should not be removed and the mixture screw readjusted unless required by major carburetor overhaul or throttle body replacement.

The E2SE carburetor, includes special design features for use with the Computer Controlled Catalytic Converter (C4) System or the Computer Command System. An electrically operated mixture control solenoid mounted in the air horn, controls air and fuel metered to the idle and main metering systems of the carburetor. The plunger located at the end of the solenoid is submerged in fuel in the fuel chamber of the float bowl. This plunger is controlled by an electrical signal from the Electronic Control Module (ECM). The Electronic Control Module responding to signals from the oxygen sensor in the exhaust and other engine operating condition signals, energizes the solenoid to move the plunger down to the lean position or de-energizes the solenoid to move the plunger up to the rich position to control fuel delivery to the idle and main metering systems. When the plunger is in the lean position, fuel metering is controlled by a lean mixture screw located in the float bowl. When the plunger is in the rich position, the additional fuel is metered to the main fuel well through a rich mixture screw located at the end of the fuel supply channel in the float bowl. Air metered to the idle system is controlled by the up and down movement of the mixture control solenoid plunger. The plunger increases or decreases air supplied to the idle system which is further metered by the

idle air bleed screw. The plunger cycles up and down approximately 10 times per second, controlling air and fuel mixtures.

On 1981 models with 4-151 engine and air conditioning and 1982 models with 4-112 (1.8L) engine, an idle speed control motor which is controlled by the Electronic Control Module is used to control idle speed, Fig. 1B. The curb idle speed is programmed into the Electronic Control Module and no attempt should be made to adjust idle speed using the idle speed control motor.

CAUTION: On 1980-83 units, use care not to remove the special friction reducing coating applied to the primary and secondary throttle shafts, the secondary actuating lever and lockout lever. On 1980 V6 engine units and on all 1981-83 units, a special graphite compound is also applied to the secondary throttle bore and valve.

Float Level Adjustment

Fig. 2

1. Hold float retainer firmly in place and push float lightly against needle.
2. With an adjustable T-scale, measure distance between float bowl gasket surface (gasket removed) and float toe.
3. To adjust, remove float and bend float arm.

NOTE: On some 1983 units, a float stabilizing spring is used. Use care when removing this spring.

4. Check float alignment after adjustment.

Pump Adjustment

NOTE: The pump adjustment should not be altered from the specified setting.

1979-80 General Motors Units, Fig. 3

1. Close throttle valves and ensure that fast idle screw is not contacting fast idle cam steps.
2. Measure distance between air horn cast-

CARBURETORS

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1. SOLENOID, Mixture Control
 2. SCREW, Solenoid
 3. GASKET, Air Horn to Solenoid
 4. ADAPTER, Solenoid Seal
 5. SEAL, Solenoid to Float Bowl
 6. RETAINER, Solenoid Seal
 7. AIR HORN ASM (Includes Sec Metering Rod & Jet)
 8. GASKET, Air Horn
 9. SCREW, Air Horn
 10. SCREW, Air Horn
 11. SCREW, Air Horn
 12. LEVER, Pump
 13. SCREW, Pump Lever
 14. RETAINER, Pump Link
 15. VENT, Stack
 16. SCREW, Vent Stack
 17. SEAL, Pump Stem
 18. RETAINER, Pump Stem Seal
 19. SEAL, Throttle Sensor
 20. RETAINER, Throttle Sensor Seal
 21. PLUNGER, T.P.S. Actuator
 22. SHAFT, W/Lever
 23. LEVER, W/Bushing
 24. CHOKE VALVE
 25. SCREW, Choke Valve
 26. COVER, W/Coil Elec Stat
 27. STAT COVER RETAINER KIT
 28. RETAINER, Stat Cover
 29. HOUSING, Choke
 30. SCREW, Choke Housing
 31. HOSE, Vacuum
 32. LEVER, W/Contact Choke Coil
 33. SCREW, Choke Lever
 34. INTER. CHOKE SHAFT, W/Lever
 35. BUSHING, Inter Choke Shaft Link
 36. RETAINER, Inter Choke Shaft Link
 37. LINK, Fast Idle Cam
 38. VACUUM BREAK, W/Bracket-Primary
 39. VACUUM BREAK, W/Bracket-Secondary
 40. LINK, Air Valve
 41. BUSHING, Air Valve Link
 42. RETAINER, Air Valve Link
 43. SCREW, Vac Break
 44. SCREW, Vac Break
 45. FLOAT BOWL
 46. JET, Main Metering
 47. BALL, Pump Discharge
 48. SPRING, Pump Discharge
 49. GUIDE, Pump Discharge
 50. NEEDLE AND SEAT
 51. GASKET, Needle Seat
 52. CLIP, Float Needle
 53. FLOAT ASM
 54. HINGE, Pin Float
 55. SENSOR, Throttle Position
 56. SPRING, Throttle Position Sensor
 57. NUT, Filter Fuel Inlet
 58. FILTER, Fuel Inlet
 59. GASKET, Filter Nut
 60. SPRING, Fuel Filter
 61. SPRING, Pump Return
 62. PUMP ASM
 63. INSERT, Float Bowl
 64. INSERT, Float Bowl
 65. SOLENOID, Idle Stop
 66. GASKET, Throttle Body
 67. SCREW, Throttle Body
 68. PUMP ROD
 69. SCREW, Cam
 70. CLIP, Cam Screw
 71. NEEDLE, W/Spring
 72. SCREW, Throttle Stop
 73. SPRING, Throttle Stop Screw
 74. THROTTLE BODY ASM
 75. GASKET, Flange

Exploded view of Rochester model E2SE carburetor (Typical of model 2SE)

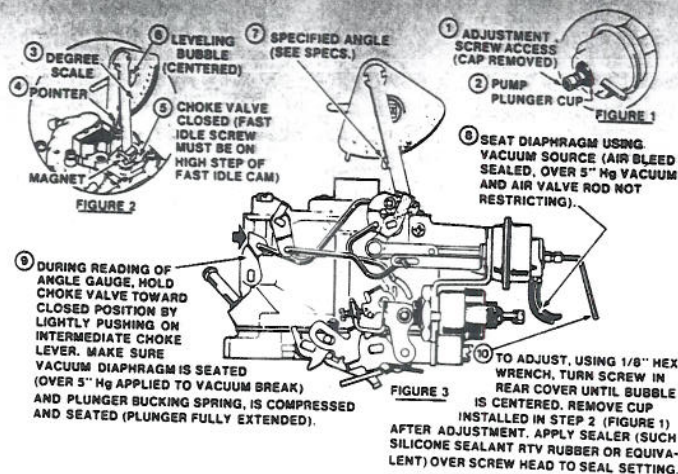


Fig. 10 Primary vacuum break adjustment (Typical). 1981-82 E2SE units

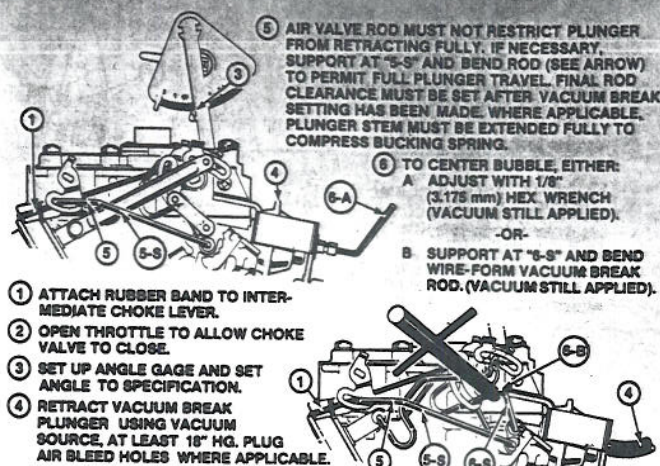


Fig. 11 Primary vacuum break adjustment. 1983 units

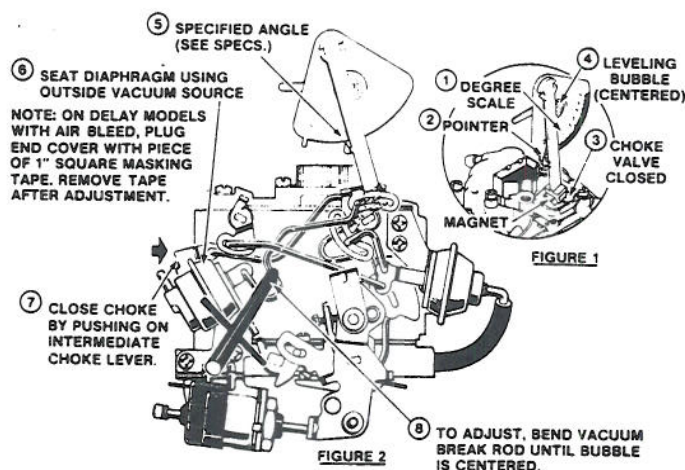


Fig. 12 Secondary vacuum break adjustment. 1979-80 units

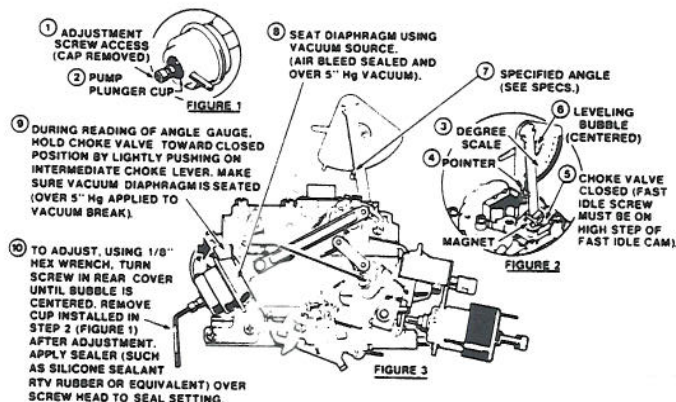


Fig. 13 Secondary vacuum break adjustment (Typical). 1981-82 units

1983 Units, Fig. 11

1. Attach rubber band to intermediate choke shaft to hold choke valve closed.
2. Install angle gauge and set angle to specifications. Refer to Specifications Chart.
3. Using outside vacuum source, retract vacuum break plunger with a minimum of 15 inches Hg of vacuum.
4. Ensure that air valve rod does not restrict plunger from full retraction. If necessary, bend rod as shown to permit full plunger travel.
5. Make adjustment with vacuum still applied, by rotating adjusting screw with a 1/8 inch Allen wrench, or bending rod as shown until bubble is centered.

Secondary Vacuum Break Adjustment

1979-80 Units, Fig. 12

1. Rotate degree scale until zero is opposite pointer, then with choke valve completely closed, place magnet on top of choke valve and rotate bubble until centered.
2. Rotate scale so specified degree for adjustment is opposite pointer.

3. Seat vacuum diaphragm with an external vacuum source.
4. Hold choke valve toward closed position by pushing on intermediate choke lever. Ensure that bucking spring, if used, is compressed and seated.
5. To adjust, bend vacuum break rod as shown until bubble is centered.

1981-82 Units, Fig. 13

NOTE: Before performing adjustment procedure, remove secondary vacuum break from carburetor and position bracket in a vise, then grind off adjusting screw cap and reinstall vacuum break. Plug vacuum break end cover using an accelerator pump plunger cup or equivalent. After completing adjustment remove pump plunger cup.

1. Rotate degree scale so that zero is opposite pointer, then with choke valve completely closed and fast idle screw on high step of fast idle cam, place magnet on top of choke valve and rotate until bubble is centered.
2. Rotate scale so that specified degree for

adjustment is opposite pointer.

3. Seat choke diaphragm using a vacuum source with over 5 inches Hg of vacuum.
4. Hold choke valve toward the closed position by lightly pushing on intermediate choke lever and note angle gauge reading. When noting reading check to ensure that vacuum diaphragm is seated.
5. Rotate adjusting screw in rear cover until bubble is centered. After completing adjustment, apply a suitable sealer over adjusting screw head.

NOTE: Remove pump plunger cup from end cover before applying sealer over adjusting screw head.

1983 Units, Fig. 14

1. Attach rubber band to intermediate choke lever to hold choke valve closed.
2. Install angle gauge and set angle to specifications. Refer to Specifications Chart.
3. Using outside vacuum source, retract vacuum break plunger with a minimum of 15 inches Hg of vacuum, then plug air bleed holes if applicable.

CARBURETORS

- 1 ATTACH RUBBER BAND TO INTERMEDIATE CHOKE LEVER.
- 2 OPEN THROTTLE TO ALLOW CHOKE VALVE TO CLOSE.
- 3 SET UP ANGLE GAGE AND SET ANGLE TO SPECIFICATION.
- 4 RETRACT VACUUM BREAK PLUNGER USING VACUUM SOURCE, AT LEAST 18" HG. PLUG AIR BLEED HOLES WHERE APPLICABLE. WHERE APPLICABLE, PLUNGER STEM MUST BE EXTENDED FULLY TO COMPRESS PLUNGER BUCKING SPRING.
- 5 TO CENTER BUBBLE, EITHER:
 - A. ADJUST WITH 1/8" (3.175 mm) HEX WRENCH (VACUUM STILL APPLIED)
 - OR-
 - B. SUPPORT AT "5-8", BEND WIRE-FORM VACUUM BREAK ROD (VACUUM STILL APPLIED)

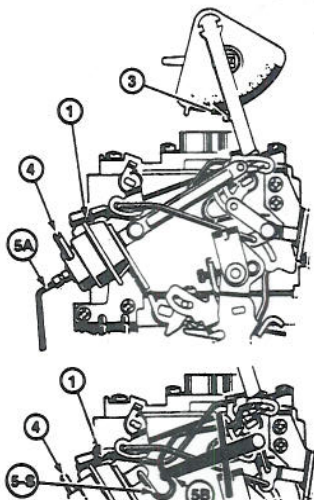


Fig. 14 Secondary vacuum break adjustment. 1983 units

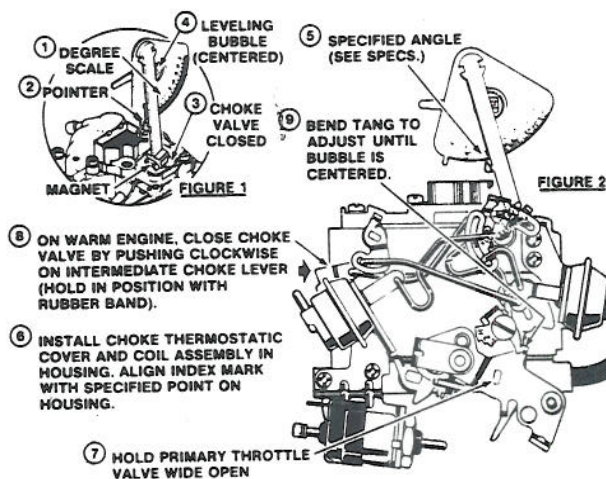


Fig. 16 Unloader adjustment (Typical)

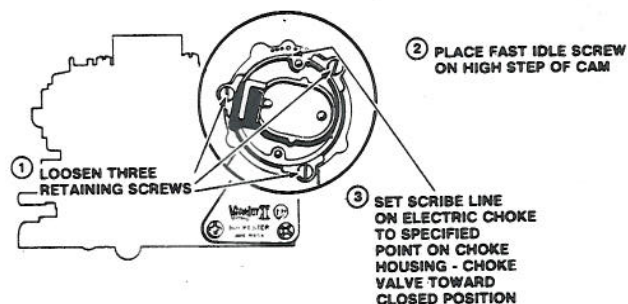


Fig. 15 Choke setting adjustment. 1979 2SE units

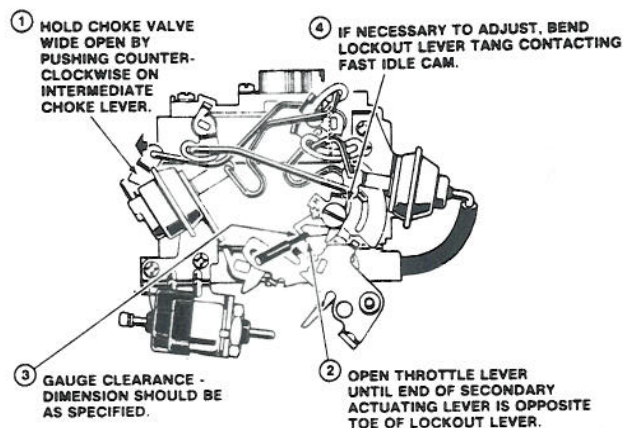


Fig. 17 Secondary lockout adjustment

4. Make final adjustment with vacuum still applied, by rotating adjusting screw with a 1/8 inch Allen wrench, or bending rod as shown until bubble is centered.

1979 2SE Units, Fig. 15

1. Loosen choke cover retaining screws.
2. Place fast idle screw on high step of cam.
3. Align scribe line on choke cover with specified point on housing. Rotate cover toward closed choke position.
4. Tighten choke cover retaining screws.

Unloader Adjustment

Fig. 16

1. Rotate degree scale until zero is opposite pointer, then with choke valve completely closed, place magnet on top of choke valve and rotate bubble until centered.
2. Rotate degree scale so specified degree for adjustment is opposite pointer.
3. With choke setting properly adjusted, hold primary throttle valve wide open.
4. On warm engines and 1983 units, close

- 2 TURN TENSION ADJUSTING SCREW COUNTERCLOCKWISE UNTIL AIR VALVE JUST CLOSURES THEN TURN ADJUSTING SCREW COUNTERCLOCKWISE SPECIFIED NUMBER OF TURNS
- 2 TURN TENSION ADJUSTING SCREW COUNTERCLOCKWISE UNTIL AIR VALVE OPENS PART WAY

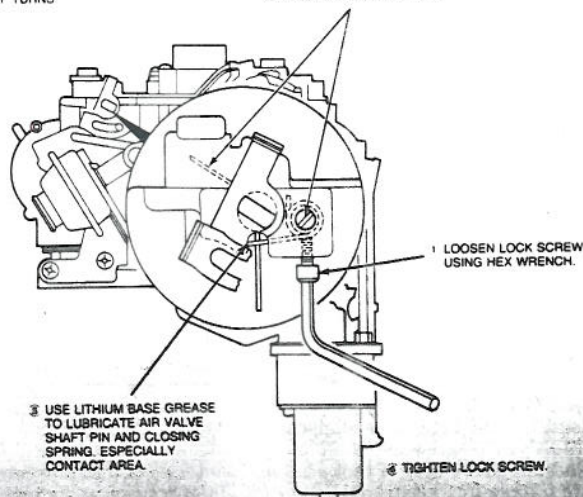


Fig. 18 Air valve spring adjustment. 1982-83 E2SE models

choke valve by pushing on intermediate choke lever and hold in position with a rubber band.

5. To adjust, bend tang on throttle lever until bubble is centered.

Secondary Lockout Adjustment

Fig. 17

1. Hold choke valve wide open by pulling on intermediate choke lever.
2. Position throttle lever until end of secondary actuating lever is opposite toe of lockout lever.

3. Insert specified gauge between throttle lever and secondary lockout lever toe.
4. To adjust, bend lockout lever tang contacting fast idle cam.

Air Valve Spring Adjustment

1982-83 E2SE Units, Fig. 18

1. Loosen lock screw, then turn adjusting screw clockwise until air valve is partially open.

NOTE: On 1983 units, it may be necessary to remove the intermediate choke rod to

gain access to the lock screw.

2. Turn adjusting screw counterclockwise until air valve just closes, then turn screw an additional turn counterclockwise and tighten lock screw.

NOTE: On 1983 units with part no. 17083650, rotate the screw 1/2 turn only.

3. Lubricate air valve shaft pin and closing spring with lithium base grease.

Holley Carburetor Section

1000, 2000 & 6145 SERIES CARB. ADJUSTMENT SPECIFICATIONS

See Tune Up Chart in car chapter for curb and fast idle speeds.

Year	Carb. Part No. ①	Carb. Model	Float Level (Dry)	Fuel Level (Wet)	Pump Setting	Bowl Vent Clearance	Fast Idle Bench	Choke Unloader Clearance	Vacuum Kick Drill Size	Cam Position Drill Size	Choke Setting
CHRYSLER CORP.											
1977	R-7632A	1945	②	—	27/32 ③	1/16	.080	.250	.110	.080	⑩
	R-7633A	1945	②	—	221/64 ④	1/16	.080	.250	.110	.080	⑩
	R-7635A	1945	②	—	221/64 ④	—	.080	.250	.110	.080	⑩
	R-7671A	2245	3/16	—	5/16 ⑤	.025	.110	.170	.110	.110	⑩
	R-7744A	1945	②	—	221/64 ④	1/16	.080	.250	.130	.080	⑩
	R-7745A	1945	②	—	27/32	1/16	.080	.250	.150	.080	⑩
	R-7746A	1945	②	—	221/64	1/16	.080	.250	.110	.080	⑩
	R-7764A	1945	②	—	27/32	1/16	.080	.250	.110	.080	⑩
1978	R-7765A	1945	②	—	221/64	1/16	.080	.250	.110	.080	⑩
	R-7988A	1945	②	—	27/32	1/16	.080	.250	.110	.080	⑩
	R-7989A	1945	②	—	221/64	1/16	.080	.250	.110	.080	⑩
	R-7990A	2280	9/32	—	⑥	.030	.070	.310	.150	.070	⑩
	R-7991A	2245	3/16	—	17/64 ⑤	.025	.110	.170	.110	.110	⑩
	R-8008A	1945	②	—	221/64	1/16	.080	.250	.110	.080	⑩
	R-8010A	1945	②	—	221/64	1/16	.080	.250	.130	.080	⑩
	R-8448A	2280	9/32	—	⑥	.030	.070	.310	.150	.070	⑩
1979	R-8450A	2245	3/16	—	17/64 ⑤	.025	.110	.170	.110	.110	⑩
	R-8452A	1945	②	—	15/8 ③	1/16	.080	.250	.110	.080	⑩
	R-8523A	1945	②	—	145/64 ⑤	1/16	.080	.250	.110	.080	⑩
	R-8680A	1945	②	—	15/8 ③	1/16	.080	.250	.110	.080	⑩
	R-8718A	1945	②	—	145/64 ⑦	1/16	.090	.250	.150	.090	⑩
1980	R-8831A	1945	②	—	15/8 ③	1/16	.090	.250	.140	.090	⑩
	R-9179A	1945	②	—	13/4 ⑧	—	.090	—	.150	.090	⑩
	R-9687A	1945	⑨	—	139/64 ⑧	—	.090	.250	.150	.090	⑩
1981	R-9695A	6145	⑨	—	139/64 ⑧	—	.090	.250	.150	.090	⑩
	R-9628A	1945	⑨	—	1.615 ⑧	—	.090	.250	.150	.090	⑩
1982	R-9687A	1945	⑨	—	1.615 ⑧	—	.090	.250	.150	.090	⑩
	R-9695A	6145	⑨	—	1.615 ⑧	—	.090	.250	.150	.090	⑩
	R-4042A	6145	⑨	—	1.615 ⑧	—	.090	.250	.150	.090	⑩

①—Located on tag attached to carburetor or on casting.

②—Flush with top of bowl cover gasket with bowl inverted.

③—Slot #2

④—Slot #3

⑤—Slot #1

⑥—Flush with top of bowl vent casting.

⑦—Hole position No. 1.

⑧—Hole position No. 2.

⑨—Flush with top of bowl casting to .050 inch above with bowl inverted.

⑩—Tamper-resistant.

Continued